

REMARKS

Claims 19-44 are pending in this application, with claims 19, 23, 27, 32, 36 and 41 being independent. Claims 19, 21, 23, 25, 27, 28, 30, 32, 34, 36, 39, 41 and 43 have been amended for clarity. For example, the independent claims have been further amended to recite a pulse laser light that is emitted at a rate of N pulses per second, as set forth in the specification at page 13, lines 20-26, which describes a laser light that is emitted from an oscillator 2. In addition, in view of the Examiner's Amendment, claims 19, 23, 27, 32, 36 and 41 have been amended to change "emitting pulse laser beams" to "emitting a pulse laser light." Finally, the independent claims have been amended to recite that L is greater than zero, a property of L that was previously expressed through the recitation that $3 \leq LN/V \leq 100$. No new matter has been introduced.

Claims 19-44 have been rejected as being anticipated by Yamazaki (U.S. Patent No. 6,242,292). With respect to claim 19 and its dependent claims, applicant requests reconsideration and withdrawal of this rejection because Yamazaki does not describe or suggest shaping pulse laser light into a beam elongated in one direction and having a normal-distribution type energy profile of width L (in units of meters) perpendicular to the direction, scanning the semiconductor film with the beam perpendicular to the direction at a speed V (in units of meters/second), and having the number of beams applied to the arbitrarily selected portion in one scan satisfy a relationship $3 \leq LN/V \leq 100$, as recited in claim 19. As set forth in the application at, for example, page 12, lines 8-14, use of a beam having the recited energy profile permits a process in which the illumination energy on the irradiated semiconductor surface is gradually increased and then gradually decreased to attain desired annealing effects while suppressing surface roughening of a semiconductor film. Thus, the techniques may be used to avoid or reduce the problem of nonuniformity of the effects of annealing by laser light illumination.

Yamazaki, which does not address the problem of nonuniformity, is simply silent as to the noted features of the claim. Apparently recognizing this, the rejection asserts that L can be assumed to have any value and then assumes that L has a value of zero. However, this is

incorrect in that L cannot be assumed to have any value (since L must satisfy the relationship $3 \leq LN/V \leq 100$) and, in particular, L cannot have the value of zero (since, if L were zero, LN/V would also equal zero and could not satisfy the recited $3 \leq LN/V \leq 100$). Moreover, to further clarify this point, claim 19 has been further amended to affirmatively recite that L is greater than zero. For at least these reasons, applicant requests reconsideration and withdrawal of the rejection of claim 19 and its dependent claims.

Like claim 19, each of independent claims 23, 27, 32, 36 and 41 recites shaping pulse laser light into a beam elongated in one direction and having a normal-distribution type energy profile (claims 23 and 27) or a trapezoidal energy profile (claims 32, 36 and 41) of width L (where L is larger than zero) perpendicular to the direction, scanning the semiconductor film with the beam perpendicular to the direction at a speed V, and having the number of beams applied to the arbitrarily selected portion in one scan satisfy a relationship $3 \leq LN/V \leq 100$. Accordingly, applicant requests reconsideration and withdrawal of the rejection of the remaining claims for the reasons discussed above with respect to claim 19.

Applicant submits that all claims are in condition for allowance. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

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